REMARKS

This is intended as a full and complete response to the Office Action dated April 12, 2007, having a shortened statutory period for response set to expire on July 12, 2007. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1 – 15 and 17 - 44 remain pending in the application and are shown above.

Claims 1 - 44 stand rejected by the Examiner. Claim 16 has been cancelled. Claim 6 has been amended, as suggested by the Examiner. Claims 15 and 21 have been amended for clarification. Applicant submits that no new matter has been added. Reconsideration of the rejected claims is requested for reasons presented below.

Specification

The disclosure is objected to because the brief description of Figure 4 is incorrect. The specification has been amended to correct this error. Accordingly, Applicant requests withdrawal of the objection.

Claim Objections

Claim 6 stands objected to because of an informality. "First" has been added to claim 6, as suggested by the examiner. Therefore, Applicant respectfully requests withdrawal of the objection.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 2, 5, 6, 8, 12, 13, 21 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Connolly (US 6,614,569 B2). Applicant respectfully traverses this rejection.

Applicant submits that <u>Connoly</u> does not disclose each and every element recited in the claims. Regarding claims 1, 8, and 21, the Examiner states that <u>Connoly</u> discloses "a first set of one or more thin film filters (16, 17)" and "a second set of one or more thin film filters (22, 23)." However, the elements identified by the Examiner are not disclosed to have differing transmission dispersion magnitudes between sets of filters, as clearly recited in claims 1 and 8. Regarding claim 21, there is no indication that filters (22, 23) disclosed in <u>Connoly</u> have a "second dispersion magnitude being substantially attributable to an interleaver dispersion magnitude, a <u>first reflected dispersion magnitude of the first set of one or more thin film filters</u> (emphasis added), and a second transmitted dispersion magnitude of the second set of one or more thin film filters," as recited in claim 21. Therefore, Applicant respectfully submits that claims 1, 8, and 21 and all claims dependent on claims 1, 8, or 21 are allowable and respectfully requests withdrawal of the rejection.

Claims 15, 16, 19, 20, 27, 31, - 34 - 36, 40, 43 and 44 stand rejected under 35 U.S.C. § 102(e) as being anticipated by <u>Zhong</u> (US 2005/0078909 A1). Applicant respectfully traverses this rejection.

Applicant submits that Zhong does not disclose each and every element recited in the claims. Regarding claim15, the Examiner states that Zhong discloses "a first set of one or more thin film filters (704)" and "a second set of one or more thin film filters (712)." However, the elements specified by the Examiner are not disclosed to have differing transmitted dispersion magnitudes between sets of filters, as clearly recited in claim 15.

With regard to claims 27 and 36 the Examiner states that <u>Zhong</u> discloses sets of filters "wherein first and second dispersion magnitudes of the first and second sub-pluralities of channels are substantially equal," as recited in both claims. However, the outputs of Zhong are

not disclosed to have equal dispersion magnitudes. Specifically, there is no mention in <u>Zhong</u> that the dispersion magnitudes of the filters are equal, and this cannot be inferred from any teachings in this reference. Further, there is no teaching in <u>Zhong</u> of how to create outputs of equal dispersion magnitudes. Therefore, Applicant respectfully submits that claims 15, 27, and 36 and all claims dependent on claim 15, 27, or 36 are allowable and respectfully requests withdrawal of the rejection.

Claims 27 and 36 stand rejected under 35 U.S.C. § 102(e) as being anticipated by <u>Liu</u> (US 6,546,166 B1). Applicant respectfully traverses the rejection.

With regard to claims 27 and 36 the Examiner states that <u>Liu</u> discloses sets of filters "wherein first and second dispersion magnitudes of the first and second sub-pluralities of channels are substantially equal," as recited in both claims. However, the outputs of <u>Liu</u> are not disclosed to have equal dispersion magnitudes. Again, there is no mention in <u>Liu</u> that the dispersion magnitudes are equal and this cannot be inferred from any teachings in the reference. Further, there is no teaching in <u>Liu</u> of how to create outputs of equal dispersion magnitudes. Therefore, Applicant respectfully submits that claims 27 and 36 and all claims dependent on claim 27 or 36 are allowable and respectfully requests withdrawal of the rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 3, 4, 9 – 11 and 22 – 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Connolly. Claims 7, 14 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Connolly and Liu. Claims 17 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhong. Claims 28 - 30, 32, 33, 37 - 39, 41 and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu. Applicant respectfully traverses the rejections.

Based on the arguments presented above, claims 1, 8, 15, 21, 27, and 36, from which all of the claims in the obviousness rejections depend, are submitted as allowable since every

combination of the references fails to teach or suggest each and every element of these independent claims. Therefore, the cited references cannot render the claims obvious. Accordingly, Applicant respectfully requests withdrawal of the § 103 rejection and allowance of the claims.

Conclusion

The references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

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